



# IRS-1 (phospho Ser307) Polyclonal Antibody

|                    |   |
|--------------------|---|
| Catalog No         | BYab-03523  |
| Isotype            | IgG   |
| Reactivity         | Human;Mouse;Rat;Monkey  |
| Applications       | WB;IHC;IF;ELISA   |
| Gene Name          | IRS1  |
| Protein Name       | Insulin receptor substrate 1  |
| Immunogen          | Synthesized phospho-peptide around the phosphorylation site of human IRS-1 (phospho Ser307)   |
| Specificity        | Phospho-IRS-1 (S307) Polyclonal Antibody detects endogenous levels of IRS-1 protein only when phosphorylated at S307.   |
| Formulation        | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.   |
| Source             | Polyclonal, Rabbit,IgG  |
| Purification       | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.   |
| Dilution           | WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200   |
| Concentration      | 1 mg/ml   |
| Purity             | ≥90%  |
| Storage Stability  | -20°C/1 year  |
| Synonyms           | IRS1; Insulin receptor substrate 1; IRS-1   |
| Observed Band      | 170kD   |
| Cell Pathway       | nucleus,cytoplasm,cytosol,plasma membrane,insulin receptor complex,caveola,intracellular membrane-bounded organelle,  |
| Tissue Specificity | Epithelium,Eye,Skeletal muscle,   |
| Function           | disease:Polymorphisms in IRS1 may be involved in the etiology of non-insulin-dependent diabetes mellitus (NIDDM) [MIM:125853].,function:May mediate the control of various cellular processes by insulin. When phosphorylated by the insulin receptor binds specifically to various cellular proteins containing SH2 domains such as phosphatidylinositol 3-kinase p85 subunit or GRB2. Activates phosphatidylinositol 3-kinase when bound to the regulatory p85 subunit.,polymorphism:The Arg-971 polymorphism impairs the ability of insulin to stimulate glucose transport, glucose transporter translocation, and glycogen synthesis by affecting the PI3K/AKT1/GSK3 signaling pathway. The polymorphism at Arg-971 may contribute to the in vivo insulin resistance observed in carriers of this variant. Arg-971 could contribute to the risk for atherosclerotic |

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cardiovascular diseases associated with non-insulin-dependen

### Background

This gene encodes a protein which is phosphorylated by insulin receptor tyrosine kinase. Mutations in this gene are associated with type II diabetes and susceptibility to insulin resistance. [provided by RefSeq, Nov 2009],

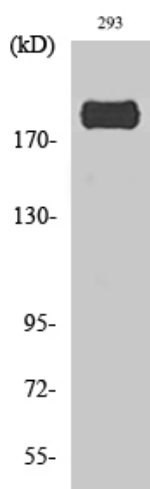
### matters needing attention

Avoid repeated freezing and thawing!

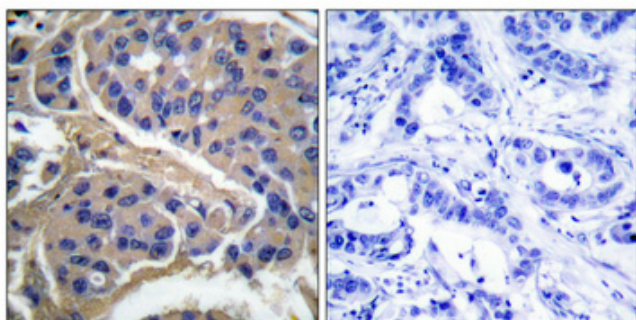
### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

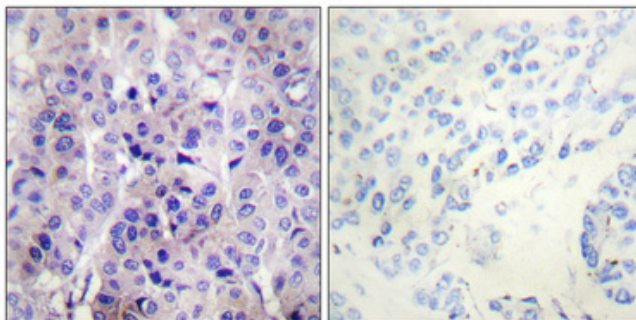
## Products Images



Western Blot analysis of various cells using Phospho-IRS-1 (S307) Polyclonal Antibody diluted at 1:1000

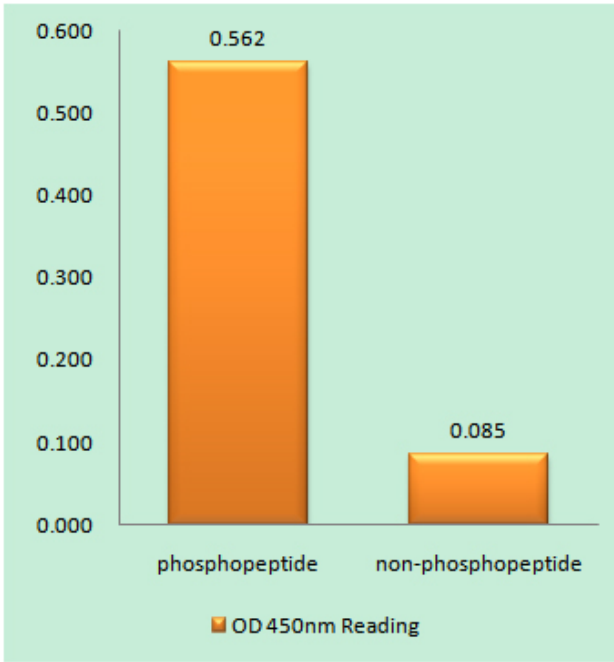


Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.

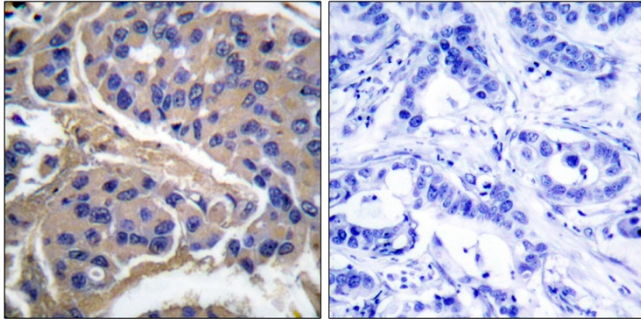


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Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using IRS-1 (Phospho-Ser307) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast cancer, using IRS-1 (Phospho-Ser307) Antibody. The picture on the right is blocked with the IRS-1 (Phospho-Ser307) peptide.